REMARKS

Reconsideration and allowance is respectfully requested as Applicants have amended the claims in the manner believed consistent with the Examiner's suggestion noted in paragraph 1 of the final Office Action.

More particularly all the independent claims namely, 1, 14 and 15 have been amended to include the suggested wording of a replaceable control unit with a, "penetrating conductance sensor replaceably removable from a filter cartridge wall" or a "control unit replaceably removable from a filter cartridge wall having at least one conductance sensor for penetrating through said replaceable filter cartridge wall."

In addition the Examiner is correct that claim 3 previously lacked antecedent basis for "the top wall". Claim 3 has been corrected in accordance with the suggestion in paragraphs 2 and 3 of the final Office Action.

The Prior Art

As currently amended the claims are believed patentable over the prior art. The prior art does not teach or suggest a replaceable control unit having a penetrating conductance sensor that is replaceably removable through a filter cartridge wall. The prior art may have a conductance sensor that can be disassembled and removed from a filter cartridge wall i.e. Jiang, et al. 5,846,417 and Hutchins, et al. 4,437,986 but such devices do not have a replaceable control unit with penetrating conductance sensors that puncture through a filter cartridge wall.

Moreover the Jiang, et al. '417 and Hutchins, et al. '986 prior art does not have a filter cartridge with a break point or an area of elastic sealing material provided to allow a penetrating conductance sensor to break through or puncture through a wall of a replaceable filter cartridge as claimed in independent claims 14 and 15.

It is not obvious from the prior art to utilize a penetrating conductance sensor to puncture or otherwise destroy

the wall of a filter cartridge. The walls of prior art filter cartridges are considered to be immutable and not subject to puncturing without destroying the filter.

Due to the importance of the filter cartridge wall in preserving the integrity of the filter one skilled in the art would not consider needle shaped penetrating conductance sensors for penetrating through or destroying the integrity of the filter cartridge wall. The case of *In re Dulberg*, 289 F.2d 522, 129 USPQ 348, 349 (CCPA 1961) was reviewed and deemed inapposite. In *Dulberg* the issue of obviousness centered around the fact that the prior art Peterson structure fully met the terms of the claim except for, "the obvious expedient of making the cap readily removable" id at 349.

In this case it is not an obvious expedient to puncture the walls of a filter to construct a replaceable control unit without destroying the filter. Moreover the prior art in this case does not fully satisfy the terms of the appealed claims as the prior art does not have a "replaceable control unit" that has at least "one penetrating conductance sensor replaceably removable from the filter cartridge wall." Further the prior art does not have

"at least one needle shaped electrode" or a "needle shaped" penetrating conductance sensor" or a replaceable filter cartridge having a break point or an elastic sealing material as claimed.

It is therefore deemed the claims are not obvious and are hence patentable which action is respectfully requested.

Respectfully submitted,

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